

Antenna

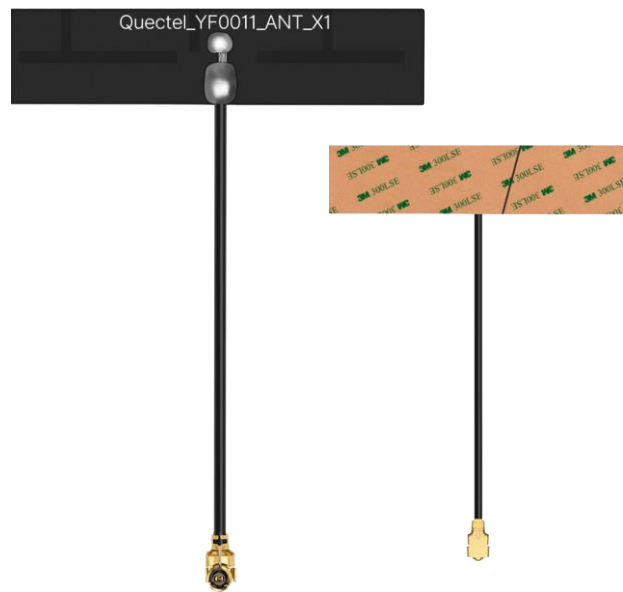
YF0011KA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2022-07-25	Richard LIU/ Joye WANG	Creation of the document
1.0	2022-07-25	Richard LIU/ Joye WANG	First official release

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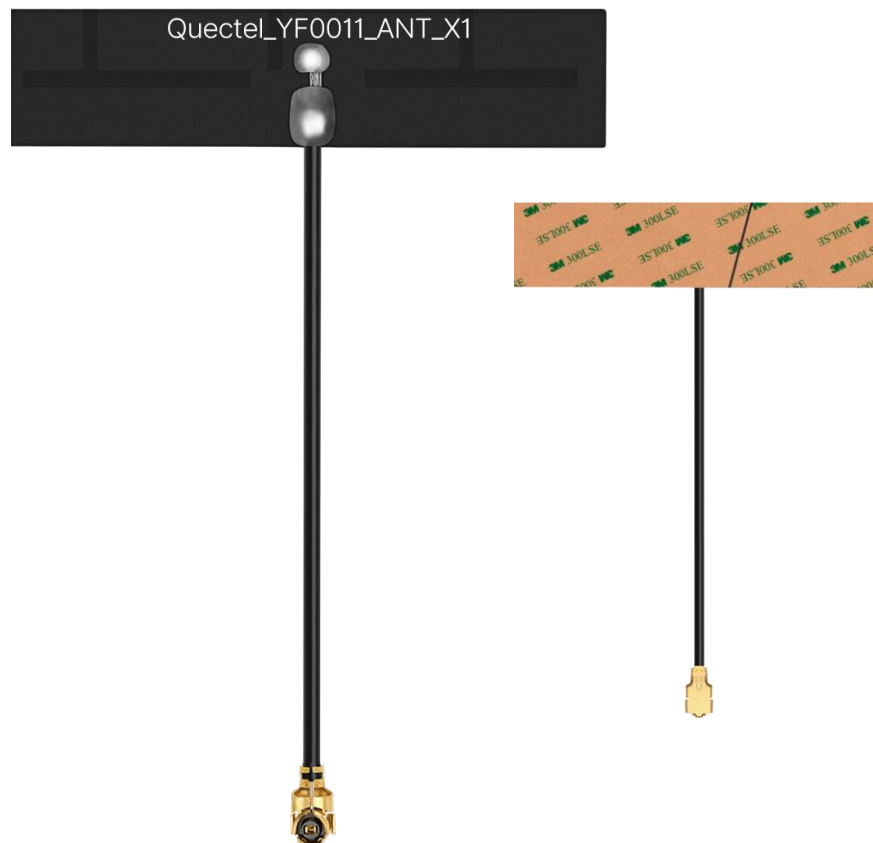
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1 Product Description

Quectel Wi-Fi antenna covers 2.4 GHz, 5 GHz, and up to 7 GHz bands, fully satisfying customers' requirements for Wi-Fi 5, Wi-Fi 6, and Wi-Fi 6E. There are various antenna types, including built-in FPC antenna, ceramic patch antenna, and other external antennas of different shapes or sizes. The antenna performance meets the customers' demands for efficiency, gain, and radiation and ensures the superior experience of the customers' products in use.

2 Product Features

- 2.4 & 5.8 GHz Wi-Fi dual-band
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400–2500 MHz, 5150–5850 MHz
Input Impedence	50 Ω
VSWR	≤ 2.66
Gain	≤ 2.3 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size (mm)	38.9 × 9
Material	FPC
Cable Type & Length	$\Phi 1.13$ Black & 50.5 mm
Connector	IPEX 1
Color	Black
Weight	Typ. 0.5 g
Mounting Type	Adhesive
Working Temperature	-40 °C to +85 °C

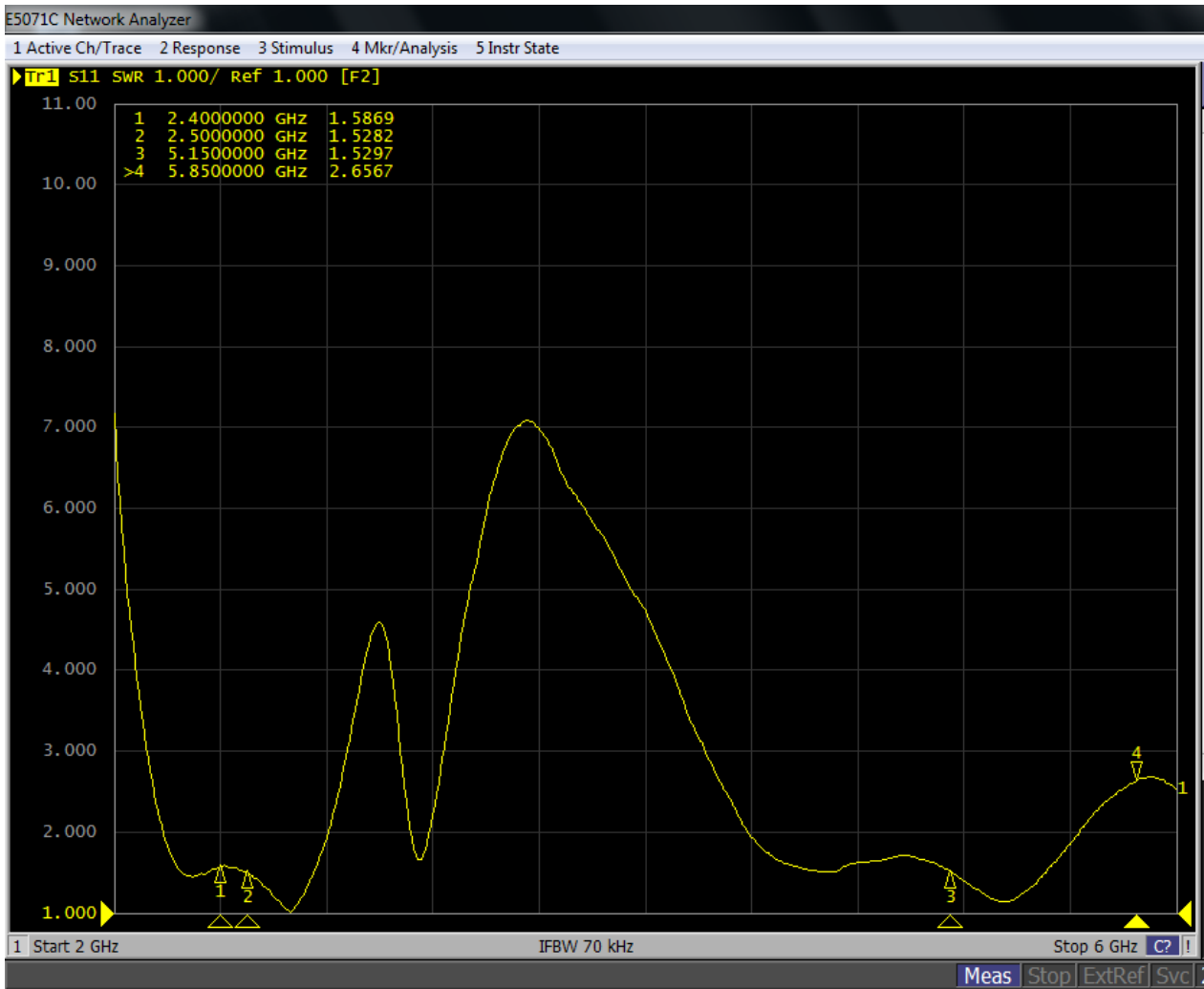
4 Overall Performance

4.1. Test Environment

- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone®2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz

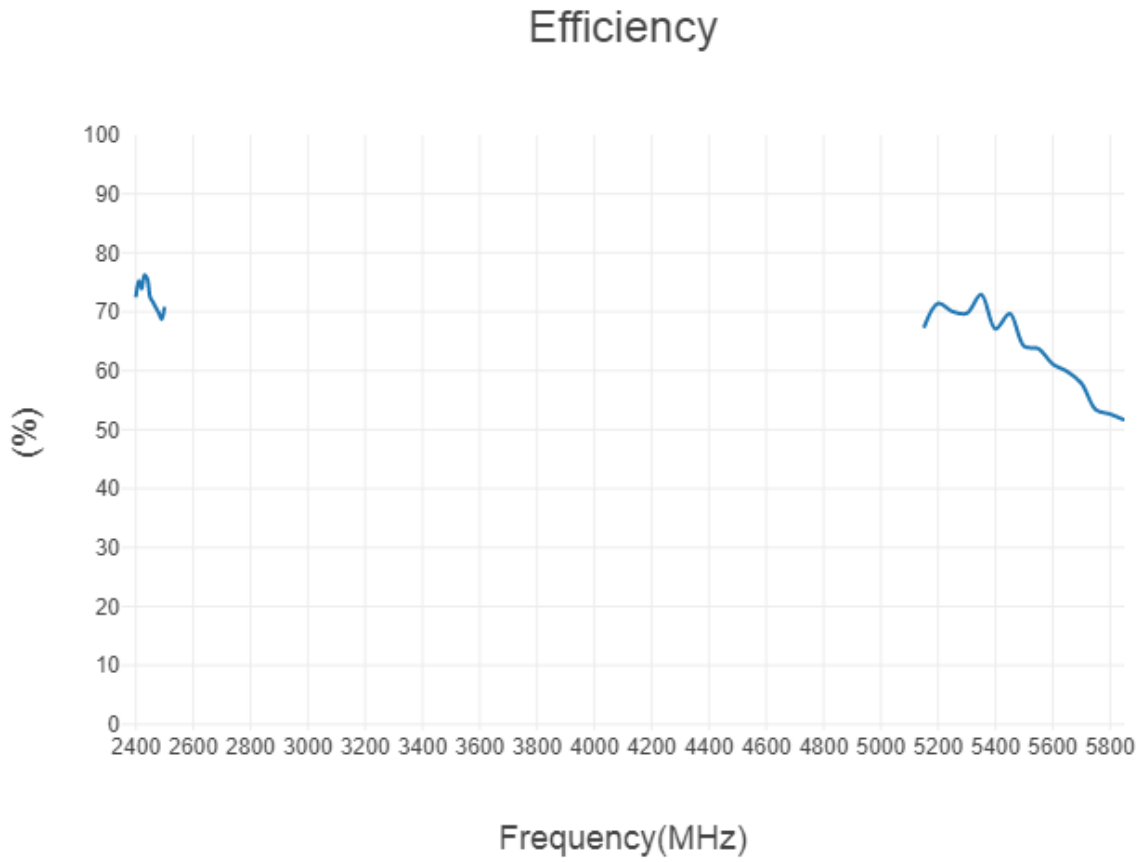


4.2. VSWR



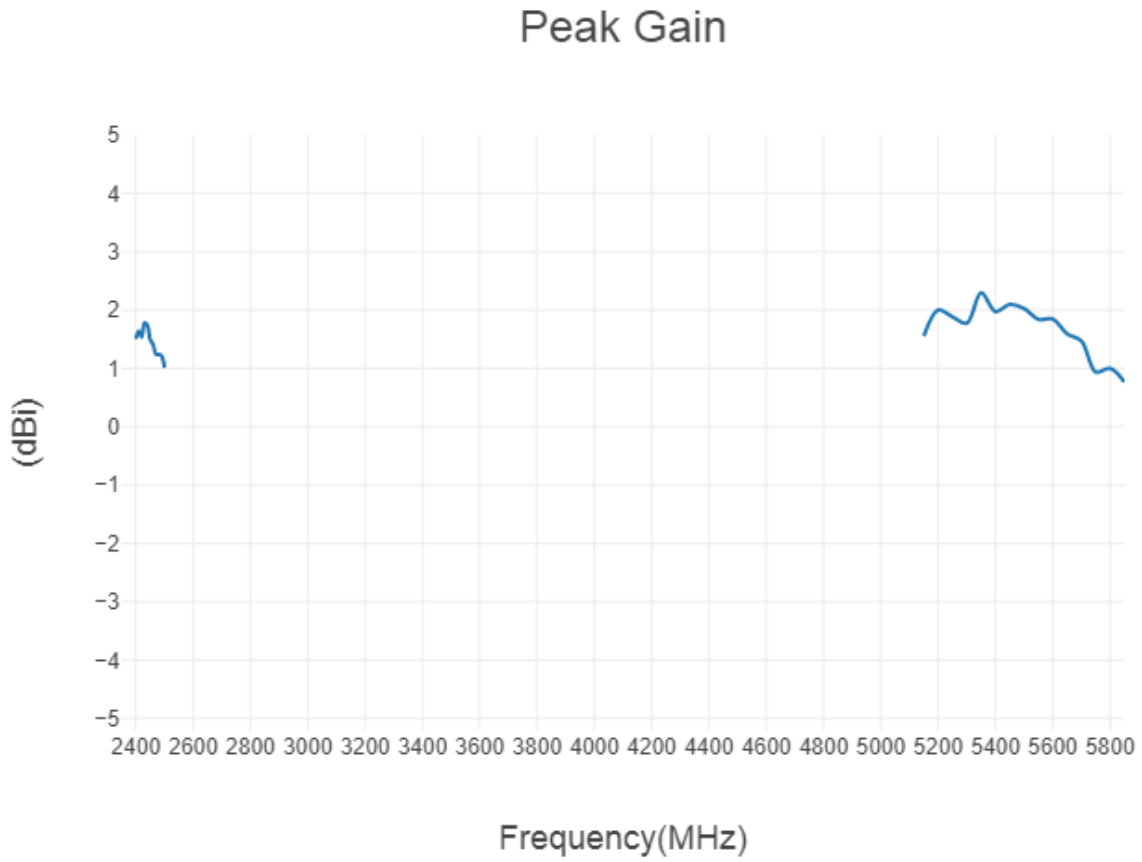
Frequency (MHz)	2400	2500	5150	5850
VSWR	1.58	1.53	1.53	2.66

4.3. Efficiency



Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	72.4	72.4	70.8	67.3	63.7	51.6

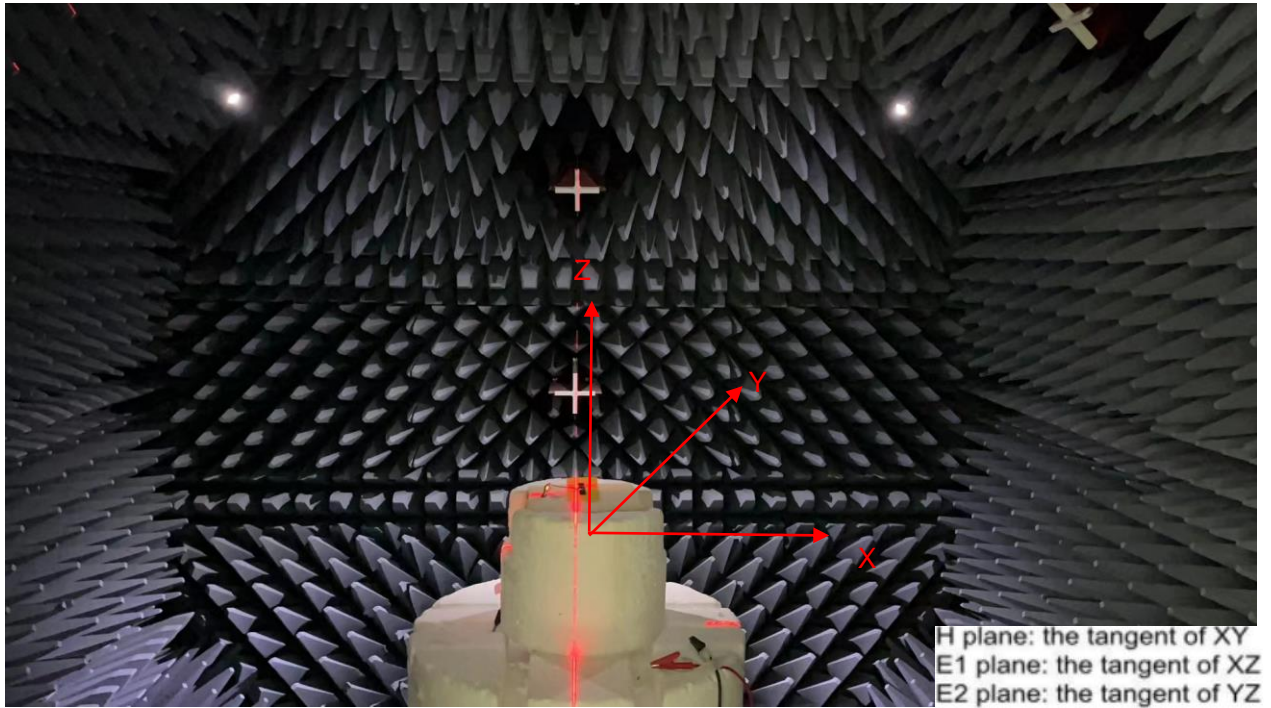
4.4. Peak Gain

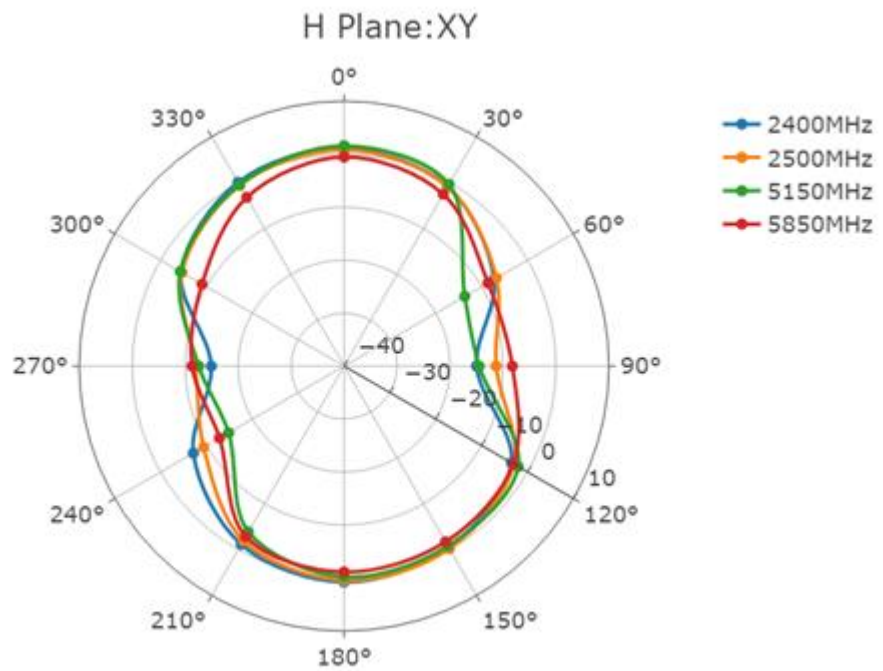
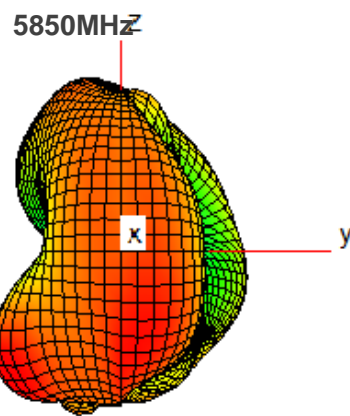
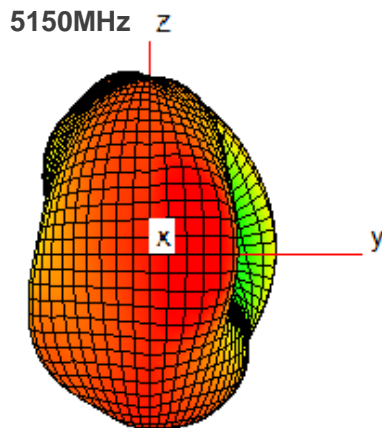
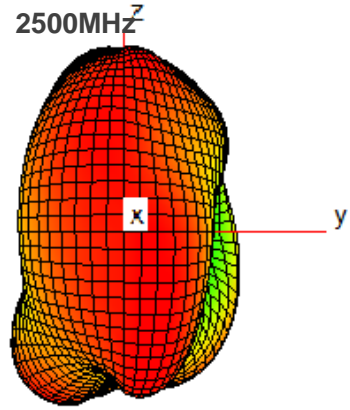
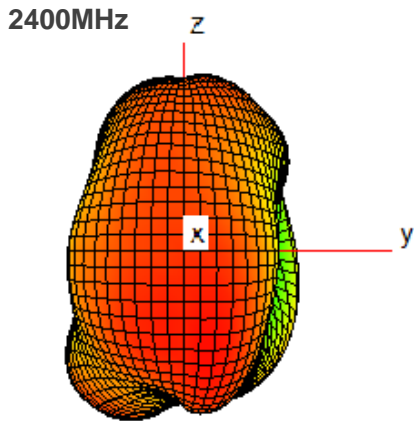


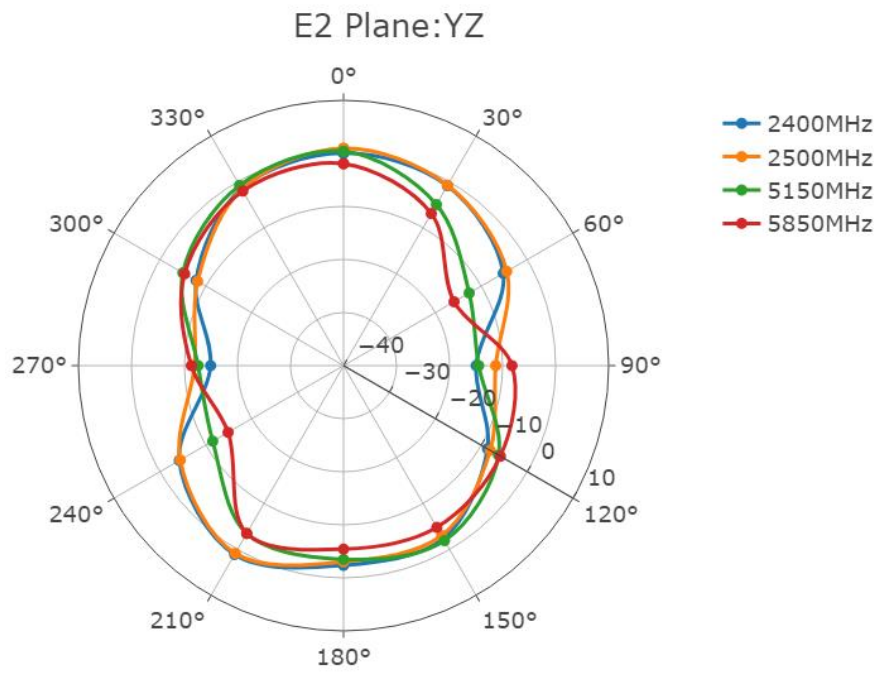
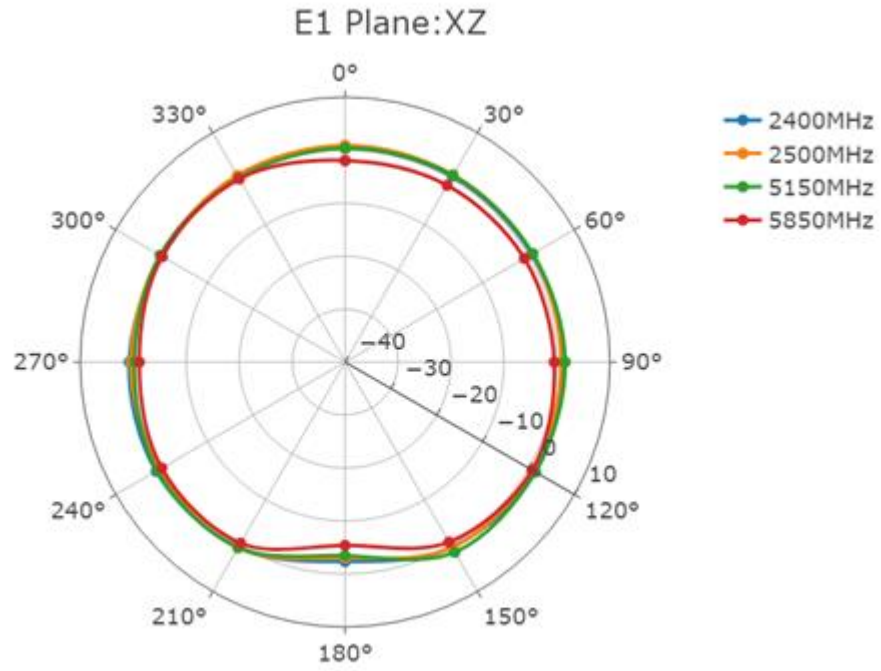
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Peak Gain (dBi)	1.51	1.49	1.01	1.55	1.84	0.77

4.5. Radiation Pattern

- Test condition: stick on 1 mm thick FR4 board.







5 Product Size

ROHS

